

# TECHNICAL SPECIFICATIONS MQV1394

## FEATURES

- ●Full Range VA4<sup>™</sup> loudspeaker system
- Optimized for permanent install only
- •Direct radiating 15-inch woofer in optimally vented enclosure
- ●Horn loaded 10-inch cone with VA4<sup>™</sup> phase plug
- •2-inch exit/75mm voice coil compression driver on constant directivity horn

## DESCRIPTION

The MQV Series is part of the next generation of permanent installation loudspeakers. Using VA4<sup>™</sup> Technology developed for the KF700 series, the MQV range replaces the ASV range of virtual array systems.

The MQV1394 uses a single, direct radiating 15-inch woofer in an optimally vented enclosure.

A single, horn loaded 10-inch midrange cone with a special geometry is used which produces a time coherent wavefront through the upper portion of the midrange that is critical to vocal articulation. A phase plug with radial slots then serves to reduce the mechanical resistance of the subsystem without affecting the directivity of the source, allowing flawless vertical arraying of multiple MQV modules

A high power 2-inch exit/75mm voice coil compression driver is mounted on a constant directivity horn for consistent, accurate dispersal of HF information.

## APPLICATIONS

The MQV1394 is engineered as a full range component for very large format arrays and is an effective tool in largescale permanent installations. Comprehensive mounting points allow for flexible installation.

#### Applications include:

Large Church Large Arenas Stadiums

#### **DESCRIPTIVE DATA**

LF Subsystem	1x 15-in Woofer		
MF Subsystem	1x 10-in Horn Loaded Cone		
HF Subsystem	2-in Exit/75mm Voice Coil Compression Driver on Constant Directivity Horn		
Configuration	Three-way, Full Range		
Powering	Triamplified		
Cabinet Type (shape)	Trapezoid		
Enclosure Materials	Baltic Birch Plywood		
Finish	Wear-resistant Textured Black Paint		
Connectors	1x 6-Terminal Barrier Strip & 1x Neutrik NL8 Speakon		
Suspension Hardware	(16) 3/8″-16 Threaded Mounting Points (4 each on top, bottom and sides)		
Grill	Powder Coated Perforated Steel		

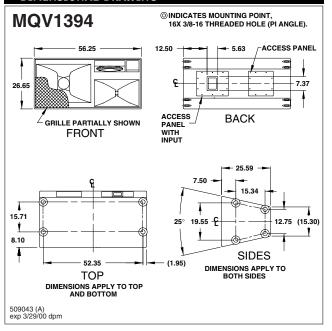




Dimensions	Inches	Millimeters
Height (front)	26.65	677
Height (rear)	15.3	389
Width	56.25	1429
Depth	25.59	650
Trapezoid Angle	12.5 Degrees per Side	
Weights	Pounds	Kilograms
Net Weight	215	97.5
Shipping Weight	240	108.9



#### DIMENSIONAL DRAWING



#### NOMINAL DATA

Frequency Response				
±3 dB	50 Hz to 16 kHz			
-10 dB	34 Hz			
Axial Sensitivity (dB SPL, 1 Watt @ 1m)				
LF	97			
MF	108			
HF	110			
Impedance (Ohms)				
LF	8			
MF	8			
HF	8			
Power Handling, AES Standard (Watts)				
LF	550			
MF	400			
HF	200			
Calculated Maximum Output (dB SPL @ 1m)				
LF Peak	130.4			
MF Peak	140.0			
HF Peak	139.0			
LF Long Term	124.4			
MF Long Term	134.0			
HF Long Term	133.0			
Nominal Coverage Angle, -6 dB Points (degrees)				
Horizontal	90			
Vertical	45			
Recommended High-Pass Frequency				
24 dB/Octave	35Hz			

## **ARCHITECTURAL SPECIFICATIONS**

The three-way full range loudspeaker system shall incorporate a 15-in woofer (vented), a 10-in cone MF transducer, and a 2-in exit compression driver HF transducer.

The MF driver shall be loaded into a midrange horn constructed of 3mm birch plywood reinforced with high density polyurethane foam. The MF horn shall incorporate a radial phase plug. The HF driver shall be loaded on constant directivity horn with a nominal coverage pattern of  $90^{\circ}$  (h) x  $45^{\circ}$ (v).

System frequency response shall vary no more than  $\pm 3$  dB from 50 Hz to 16 kHz measured on axis. The midrange frequency section shall produce a Sound Pressure Level (SPL) of 108 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 141 SPL on axis at 1 meter. The high frequency section shall produce a Sound Pressure Level (SPL) of 110 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 139 SPL on axis at 1 meter. The midrange frequency section shall handle 400 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms. The high frequency section shall handle 200 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 15mm thickness void-free cross-grainlaminated Baltic birch plywood and shall employ extensive internal bracing. It shall be finished in wear-resistant textured black paint. Input connectors shall be 1x 6-terminal barrier strip and one Neutrik NL8 Speakon. A total of sixteen 3/8"-16 threaded mounting points (4 each top, bottom and sides) shall be provided. The front of the loudspeaker shall be covered with a powder coated perforated steel grill.

The three-way full range loudspeaker shall be the EAW model MQV1394.